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October 31, 2017

The Honorable Jocelyn G. Boyd  
Chief Clerk/Administrator  
Public Service Commission of South Carolina  
101 Executive Center Drive, Suite 100  
Columbia SC 29210

Re: **Duke Energy Progress, LLC – Monthly Power Plant Performance Report  
Docket No. 2006-224-E**

Dear Ms. Boyd:

Pursuant to the Commission's Orders in Docket No. 1977-354-E, enclosed for filing is the Monthly Power Plant Performance Report in Docket No. 2006-224-E for the month of September 2017.

Should you have any questions regarding this matter, please do not hesitate to contact me at 803.988.7130.

Sincerely,

Rebecca J. Dulin

Enclosures

cc: Ms. Dawn Hipp, Office Regulatory Staff  
Mr. Jeff Nelson, Office Regulatory Staff  
Ms. Shannon Hudson, Office Regulatory Staff  
Ms. Nanette Edwards, Office Regulatory Staff  
Michael Seaman-Huynh, Office of Regulatory Staff  
Mr. Scott Elliott, Elliott & Elliott, P.A.  
Mr. Garrett Stone, Brickfield, Burchette, Ritts & Stone, PC  
Mr. Gary Walsh, Walsh Consulting, LLC

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

**Period: September, 2017**

Station	Unit	Date of Outage	Duration of Outage	Scheduled / Unscheduled	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
Brunswick	1	None					
	2	None					
Harris	1	None					
Robinson	2	None					

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September 2017**

**Lee Energy Complex**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
1C	9/23/2017 1:28:00 AM To 9/29/2017 6:15:00 PM	Sch	5272 Gas Turbine - Boroscope Inspection	Borescope Inspection	

**Richmond County Station**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
8	9/17/2017 1:09:00 AM To 9/17/2017 5:26:00 PM	Sch	4710 Generator Metering Devices	Adjusted DWATT meter to spec.	
9	9/3/2017 12:04:00 AM To 9/3/2017 9:49:00 PM	Sch	0710 Blowdown System Piping	U9 HP to IP B/D pipe leak repairs	

**Sutton Energy Complex**

Unit	Duration of Outage	Type of Outage	Cause of Outage	Reason Outage Occurred	Remedial Action Taken
ST1	9/7/2017 4:34:00 PM To 9/7/2017 8:13:00 PM	Unsch	9910 Maintenance Error	STG tripped, HRSG HRH logic change, forced an unblend of both HRSG's	

**Notes:**

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**September 2017  
Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>720</b>	<b>720</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>680,212</b>	<b>100.72</b>	<b>656,296</b>	<b>97.80</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>101</b>	<b>0.01</b>	<b>8,805</b>	<b>1.31</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-4,953</b>	<b>-0.73</b>	<b>5,939</b>	<b>0.89</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>675,360</b>	<b>100.00%</b>	<b>671,040</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>99.80</b>		<b>98.69</b>
<b>(L) Output Factor (%)</b>		<b>100.72</b>		<b>97.80</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,481</b>		<b>10,809</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**September 2017**  
**Harris Nuclear Station**

Unit 1

<b>(A) MDC (mW)</b>	<b>928</b>	
<b>(B) Period Hours</b>	<b>720</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>674,279</b>	<b>100.92</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>7,826</b>	<b>1.17</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-13,945</b>	<b>-2.09</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>668,160</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>98.83</b>
<b>(L) Output Factor (%)</b>		<b>100.92</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,594</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant Performance Review Plan**

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**September 2017  
Robinson Nuclear Station**

Unit 2

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>720</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>547,931</b>	<b>102.70</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>0</b>	<b>0.00</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-14,411</b>	<b>-2.70</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>533,520</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>100.00</b>
<b>(L) Output Factor (%)</b>		<b>102.70</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,465</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

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**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September 2017**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	223	222	223	379	1,047
(B) Period Hrs	720	720	720	720	720
(C) Net Generation (mWh)	120,078	116,227	91,920	228,646	556,871
(D) Capacity Factor (%)	74.79	72.71	57.25	83.79	73.87
(E) Net mWh Not Generated due to Full Scheduled Outages	0	5,128	35,855	0	40,983
(F) Scheduled Outages: percent of Period Hrs	0.00	3.21	22.33	0.00	5.44
(G) Net mWh Not Generated due to Partial Scheduled Outages	38,160	36,239	29,639	22,418	126,456
(H) Scheduled Derates: percent of Period Hrs	23.77	22.67	18.46	8.22	16.77
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	2,322	2,246	3,147	21,816	29,530
(N) Economic Dispatch: percent of Period Hrs	1.45	1.41	1.96	7.99	3.92
(O) Net mWh Possible in Period	160,560	159,840	160,560	272,880	753,840
(P) Equivalent Availability (%)	76.23	74.12	59.21	91.78	77.79
(Q) Output Factor (%)	74.79	75.12	73.71	83.79	78.12
(R) Heat Rate (BTU/NkWh)	8,976	8,870	9,095	4,750	7,238

Notes:

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September 2017**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	189	189	175	553
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	106,074	102,656	123,443	332,173
(D) Capacity Factor (%)	77.95	75.44	97.97	83.43
(E) Net mWh Not Generated due to Full Scheduled Outages	0	3,078	0	3,078
(F) Scheduled Outages: percent of Period Hrs	0.00	2.26	0.00	0.77
(G) Net mWh Not Generated due to Partial Scheduled Outages	25,200	25,334	5,606	56,140
(H) Scheduled Derates: percent of Period Hrs	18.52	18.62	4.45	14.10
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	4,806	5,013	0	9,819
(N) Economic Dispatch: percent of Period Hrs	3.53	3.68	0.00	2.47
(O) Net mWh Possible in Period	136,080	136,080	126,000	398,160
(P) Equivalent Availability (%)	81.48	79.12	95.55	85.13
(Q) Output Factor (%)	77.95	77.18	97.97	84.08
(R) Heat Rate (BTU/NkWh)	11,840	11,505	0	7,336

Notes:

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**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September 2017**

**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	214	214	248	676
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	121,230	125,425	170,258	416,913
(D) Capacity Factor (%)	78.68	81.40	95.35	85.66
(E) Net mWh Not Generated due to Full Scheduled Outages	4,655	0	0	4,655
(F) Scheduled Outages: percent of Period Hrs	3.02	0.00	0.00	0.96
(G) Net mWh Not Generated due to Partial Scheduled Outages	27,930	28,080	2,480	58,490
(H) Scheduled Derates: percent of Period Hrs	18.13	18.22	1.39	12.02
(I) Net mWh Not Generated due to Full Forced Outages	0	0	0	0
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	266	575	5,822	6,663
(N) Economic Dispatch: percent of Period Hrs	0.17	0.37	3.26	1.37
(O) Net mWh Possible in Period	154,080	154,080	178,560	486,720
(P) Equivalent Availability (%)	78.85	81.78	98.61	87.03
(Q) Output Factor (%)	81.13	81.40	95.35	86.48
(R) Heat Rate (BTU/NkWh)	11,592	11,468	0	6,821

Notes:

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- (R) Includes Light Off BTU's

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
September 2017**

**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	225	225	267	717
(B) Period Hrs	720	720	720	720
(C) Net Generation (mWh)	121,011	121,190	161,065	403,266
(D) Capacity Factor (%)	74.70	74.81	83.78	78.12
(E) Net mWh Not Generated due to Full Scheduled Outages	0	0	0	0
(F) Scheduled Outages: percent of Period Hrs	0.00	0.00	0.00	0.00
(G) Net mWh Not Generated due to Partial Scheduled Outages	39,600	38,880	716	79,196
(H) Scheduled Derates: percent of Period Hrs	24.44	24.00	0.37	15.34
(I) Net mWh Not Generated due to Full Forced Outages	0	0	975	975
(J) Forced Outages: percent of Period Hrs	0.00	0.00	0.51	0.19
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	397	397
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.21	0.08
(M) Net mWh Not Generated due to Economic Dispatch	1,389	1,930	29,087	32,406
(N) Economic Dispatch: percent of Period Hrs	0.86	1.19	15.13	6.28
(O) Net mWh Possible in Period	162,000	162,000	192,240	516,240
(P) Equivalent Availability (%)	75.56	76.00	98.91	84.39
(Q) Output Factor (%)	74.82	74.91	84.21	78.34
(R) Heat Rate (BTU/NkWh)	11,883	11,817	0	7,117

Notes:

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.
- (R) Includes Light Off BTU's

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
September 2017**

**Mayo Station**

**Unit 1**

<b>(A) MDC (mW)</b>	746
<b>(B) Period Hrs</b>	720
<b>(C) Net Generation (mWh)</b>	28,967
<b>(D) Net mWh Possible in Period</b>	537,120
<b>(E) Equivalent Availability (%)</b>	60.34
<b>(F) Output Factor (%)</b>	32.48
<b>(G) Capacity Factor (%)</b>	5.39

**Notes:**

- Effective January 2017, a change in capacity rating methodology could impact performance trending against historical results reported prior to January 2017.
- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress  
Intermediate Power Plant Performance  
Review Plan  
September 2017**

**Roxboro Station**

	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	698	711
<b>(B) Period Hrs</b>	720	720	720
<b>(C) Net Generation (mWh)</b>	167,038	273,485	187,036
<b>(D) Net mWh Possible in Period</b>	484,560	502,560	511,920
<b>(E) Equivalent Availability (%)</b>	99.70	97.33	95.87
<b>(F) Output Factor (%)</b>	61.93	54.55	62.57
<b>(G) Capacity Factor (%)</b>	34.47	54.42	36.54

**Notes:**

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- Units in commercial operation for the full month are presented. Pre-commercial or partial month commercial operations are not included.

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**October 2016 - September 2017**  
**Brunswick Nuclear Station**

	<u>Unit 1</u>	<u>Unit 2</u>		
<b>(A) MDC (mW)</b>	<b>938</b>	<b>932</b>		
<b>(B) Period Hours</b>	<b>8760</b>	<b>8760</b>		
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>8,137,355</b>	<b>99.03</b>	<b>7,139,222</b>	<b>87.44</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>70,647</b>	<b>0.86</b>	<b>691,653</b>	<b>8.47</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>53,727</b>	<b>0.65</b>	<b>216,441</b>	<b>2.65</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-44,849</b>	<b>-0.54</b>	<b>117,004</b>	<b>1.44</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,216,880</b>	<b>100.00%</b>	<b>8,164,320</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>97.75</b>		<b>90.24</b>
<b>(L) Output Factor (%)</b>		<b>99.89</b>		<b>95.54</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,425</b>		<b>10,822</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**October 2016 - September 2017**  
**Harris Nuclear Station**

**Unit 1**

<b>(A) MDC (mW)</b>	<b>928</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>7,510,487</b>	<b>92.39</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>534,528</b>	<b>6.58</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>55,236</b>	<b>0.68</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>229,432</b>	<b>2.82</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-200,403</b>	<b>-2.47</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>8,129,280</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>90.15</b>
<b>(L) Output Factor (%)</b>		<b>101.97</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,519</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress**  
**Base Load Power Plant Performance Review Plan**

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**October 2016 - September 2017**  
**Robinson Nuclear Station**

**Unit 2**

<b>(A) MDC (mW)</b>	<b>741</b>	
<b>(B) Period Hours</b>	<b>8760</b>	
<b>(C) Net Gen (mWh) and Capacity Factor (%)</b>	<b>5,839,630</b>	<b>89.96</b>
<b>(D) Net mWh Not Gen due to Full Schedule Outages</b>	<b>746,940</b>	<b>11.51</b>
<b>* (E) Net mWh Not Gen due to Partial Scheduled Outages</b>	<b>-5,308</b>	<b>-0.08</b>
<b>(F) Net mWh Not Gen due to Full Forced Outages</b>	<b>41,867</b>	<b>0.64</b>
<b>* (G) Net mWh Not Gen due to Partial Forced Outages</b>	<b>-131,969</b>	<b>-2.03</b>
<b>* (H) Net mWh Not Gen due to Economic Dispatch</b>	<b>0</b>	<b>0.00</b>
<b>* (I) Core Conservation</b>	<b>0</b>	<b>0.00</b>
<b>(J) Net mWh Possible in Period</b>	<b>6,491,160</b>	<b>100.00%</b>
<b>(K) Equivalent Availability (%)</b>		<b>87.54</b>
<b>(L) Output Factor (%)</b>		<b>102.41</b>
<b>(M) Heat Rate (BTU/NkWh)</b>		<b>10,445</b>

\* Estimate

FOOTNOTE: D and F Include Ramping Losses

**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
October, 2016 through September, 2017**

**Lee Energy Complex**

	Unit 1A	Unit 1B	Unit 1C	Unit ST1	Block Total
(A) MDC (mW)	219	218	219	379	1,036
(B) Period Hrs	8,760	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,319,601	1,295,310	1,273,819	2,428,476	6,317,206
(D) Capacity Factor (%)	68.76	67.80	66.32	73.16	69.65
(E) Net mWh Not Generated due to Full Scheduled Outages	198,487	170,577	227,146	208,770	804,980
(F) Scheduled Outages: percent of Period Hrs	10.34	8.93	11.83	6.29	8.88
(G) Net mWh Not Generated due to Partial Scheduled Outages	229,571	220,508	218,896	157,733	826,707
(H) Scheduled Derates: percent of Period Hrs	11.96	11.54	11.40	4.75	9.11
(I) Net mWh Not Generated due to Full Forced Outages	6,099	0	9,935	259,811	275,844
(J) Forced Outages: percent of Period Hrs	0.32	0.00	0.52	7.83	3.04
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	9,862	9,862
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.30	0.11
(M) Net mWh Not Generated due to Economic Dispatch	165,498	224,102	190,948	254,645	835,192
(N) Economic Dispatch: percent of Period Hrs	8.62	11.73	9.94	7.67	9.21
(O) Net mWh Possible in Period	1,919,256	1,910,496	1,920,744	3,319,296	9,069,792
(P) Equivalent Availability (%)	76.03	79.72	76.50	80.82	78.86
(Q) Output Factor (%)	77.89	79.80	79.41	85.19	81.28
(R) Heat Rate (BTU/NkWh)	9,335	9,338	9,311	4,045	7,297

Notes:

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**Duke Energy Progress  
Base Load Power Plant  
Performance Review Plan  
October, 2016 through September, 2017**

**Richmond County Station**

	Unit 7	Unit 8	Unit ST4	Block Total
(A) MDC (mW)	187	186	174	547
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,058,222	1,037,107	1,209,362	3,304,691
(D) Capacity Factor (%)	64.76	63.55	79.27	68.97
(E) Net mWh Not Generated due to Full Scheduled Outages	306,289	310,079	302,844	919,212
(F) Scheduled Outages: percent of Period Hrs	18.74	19.00	19.85	19.18
(G) Net mWh Not Generated due to Partial Scheduled Outages	147,993	150,161	26,621	324,775
(H) Scheduled Derates: percent of Period Hrs	9.06	9.20	1.75	6.78
(I) Net mWh Not Generated due to Full Forced Outages	419	8,678	0	9,097
(J) Forced Outages: percent of Period Hrs	0.03	0.53	0.00	0.19
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	4,941	4,941
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.32	0.10
(M) Net mWh Not Generated due to Economic Dispatch	121,142	125,807	0	228,741
(N) Economic Dispatch: percent of Period Hrs	7.41	7.71	0.00	4.77
(O) Net mWh Possible in Period	1,634,064	1,631,832	1,525,560	4,791,456
(P) Equivalent Availability (%)	71.23	70.24	77.70	73.74
(Q) Output Factor (%)	79.91	79.29	99.07	85.77
(R) Heat Rate (BTU/NkWh)	11,559	11,400	0	7,279

Notes:

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**Duke Energy Progress  
Base Load Power Plant  
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**Richmond County Station**

	Unit 9	Unit 10	Unit ST5	Block Total
(A) MDC (mW)	211	211	248	670
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,386,337	1,404,301	1,872,957	4,663,595
(D) Capacity Factor (%)	75.02	76.00	86.27	79.49
(E) Net mWh Not Generated due to Full Scheduled Outages	171,782	165,026	189,108	525,917
(F) Scheduled Outages: percent of Period Hrs	9.30	8.93	8.71	8.96
(G) Net mWh Not Generated due to Partial Scheduled Outages	166,408	163,667	24,713	354,788
(H) Scheduled Derates: percent of Period Hrs	9.01	8.86	1.14	6.05
(I) Net mWh Not Generated due to Full Forced Outages	5,165	3,667	446	9,277
(J) Forced Outages: percent of Period Hrs	0.28	0.20	0.02	0.16
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	0	0
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.00	0.00
(M) Net mWh Not Generated due to Economic Dispatch	118,164	111,195	83,814	313,173
(N) Economic Dispatch: percent of Period Hrs	6.39	6.02	3.86	5.34
(O) Net mWh Possible in Period	1,847,856	1,847,856	2,171,038	5,866,750
(P) Equivalent Availability (%)	80.91	81.43	90.17	84.83
(Q) Output Factor (%)	83.66	83.69	94.85	87.83
(R) Heat Rate (BTU/NkWh)	11,488	11,402	0	6,848

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**Duke Energy Progress  
Base Load Power Plant  
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**Sutton Energy Complex**

	Unit 1A	Unit 1B	Unit ST1	Block Total
(A) MDC (mW)	221	221	267	709
(B) Period Hrs	8,760	8,760	8,760	8,760
(C) Net Generation (mWh)	1,376,882	1,420,190	1,695,533	4,492,605
(D) Capacity Factor (%)	71.09	73.33	72.56	72.34
(E) Net mWh Not Generated due to Full Scheduled Outages	96,451	80,355	129,050	305,856
(F) Scheduled Outages: percent of Period Hrs	4.98	4.15	5.52	4.93
(G) Net mWh Not Generated due to Partial Scheduled Outages	226,398	227,712	30,316	484,426
(H) Scheduled Derates: percent of Period Hrs	11.69	11.76	1.30	7.80
(I) Net mWh Not Generated due to Full Forced Outages	26,261	3,176	3,449	32,886
(J) Forced Outages: percent of Period Hrs	1.36	0.16	0.15	0.53
(K) Net mWh Not Generated due to Partial Forced Outages	0	0	17,309	17,309
(L) Forced Derates: percent of Period Hrs	0.00	0.00	0.74	0.28
(M) Net mWh Not Generated due to Economic Dispatch	210,783	205,343	461,032	877,158
(N) Economic Dispatch: percent of Period Hrs	10.88	10.60	19.73	14.12
(O) Net mWh Possible in Period	1,936,776	1,936,776	2,336,688	6,210,240
(P) Equivalent Availability (%)	82.25	84.21	92.30	86.47
(Q) Output Factor (%)	78.16	78.48	77.20	77.90
(R) Heat Rate (BTU/NkWh)	11,399	11,320	0	7,072

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**Duke Energy Progress  
Intermediate Power Plant  
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**Mayo Station**

<b>Units</b>	<b>Unit 1</b>
(A) MDC (mW)	744
(B) Period Hrs	8,760
(C) Net Generation (mWh)	1,556,762
(D) Net mWh Possible in Period	6,520,824
(E) Equivalent Availability (%)	84.23
(F) Output Factor (%)	48.19
(G) Capacity Factor (%)	23.87

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**Duke Energy Progress  
Intermediate Power Plant  
Performance Review Plan  
October, 2016 through September, 2017**

**Roxboro Station**

<b>Units</b>	<b>Unit 2</b>	<b>Unit 3</b>	<b>Unit 4</b>
<b>(A) MDC (mW)</b>	673	697	710
<b>(B) Period Hrs</b>	8,760	8,760	8,760
<b>(C) Net Generation (mWh)</b>	1,715,039	2,238,420	1,298,729
<b>(D) Net mWh Possible in Period</b>	5,893,992	6,109,272	6,218,688
<b>(E) Equivalent Availability (%)</b>	97.48	93.41	73.74
<b>(F) Output Factor (%)</b>	63.20	57.30	62.74
<b>(G) Capacity Factor (%)</b>	29.10	36.64	20.88

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**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**September, 2017**

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<u>Unit Name</u>	<u>Capacity Rating (mW)</u>	<u>Full Outage Hours</u>		<u>Total</u>
		<u>Scheduled</u>	<u>Unscheduled</u>	
Brunswick 1	938	0.00	0.00	0.00
Brunswick 2	932	0.00	0.00	0.00
Harris 1	928	0.00	0.00	0.00
Robinson 2	741	0.00	0.00	0.00

**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**September 2017**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Asheville Steam 1	192	0.00	0.00	0.00
Asheville Steam 2	192	623.98	0.00	623.98
Asheville CT 3	185	0.00	0.00	0.00
Asheville CT 4	185	0.00	0.00	0.00
Darlington CT 12	133	0.00	0.00	0.00
Darlington CT 13	133	0.00	0.00	0.00
Lee Energy Complex CC 1A	223	0.00	0.00	0.00
Lee Energy Complex CC 1B	222	23.10	0.00	23.10
Lee Energy Complex CC 1C	223	160.78	0.00	160.78
Lee Energy Complex CC ST1	379	0.00	0.00	0.00
Mayo Steam 1	746	264.00	0.00	264.00
Richmond County CC 1	183	720.00	0.00	720.00
Richmond County CC 2	183	0.00	0.00	0.00
Richmond County CC 3	185	167.00	0.00	167.00
Richmond County CC 4	186	0.00	0.00	0.00
Richmond County CC 6	179	0.00	0.00	0.00
Richmond County CC 7	189	0.00	0.00	0.00
Richmond County CC 8	189	16.28	0.00	16.28
Richmond County CC ST4	175	0.00	0.00	0.00
Richmond County CC 9	214	21.75	0.00	21.75
Richmond County CC 10	214	0.00	0.00	0.00
Richmond County CC ST5	248	0.00	0.00	0.00

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**Duke Energy Progress**  
**Outages for 100 mW or Larger Units**  
**September 2017**

Unit Name	Capacity Rating (mW)	Full Outage Hours		Total Outage Hours
		Scheduled	Unscheduled	
Roxboro Steam 1	380	0.00	0.00	0.00
Roxboro Steam 2	673	0.00	0.00	0.00
Roxboro Steam 3	698	0.00	0.00	0.00
Roxboro Steam 4	711	0.00	0.00	0.00
Sutton Energy Complex CC 1A	225	0.00	0.00	0.00
Sutton Energy Complex CC 1B	225	0.00	0.00	0.00
Sutton Energy Complex CC ST1	267	0.00	3.65	3.65
Wayne County CT 10	192	0.00	0.00	0.00
Wayne County CT 11	192	0.00	0.00	0.00
Wayne County CT 12	193	25.00	0.00	25.00
Wayne County CT 13	185	0.00	0.00	0.00
Wayne County CT 14	197	83.02	0.00	83.02

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